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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shinya Fujibayashi

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

DOLLINGER, MICHAEL M

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

12/08/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com
PPROCESSING@SUGHRUE.COM
USPTO@SUGHRUE.COM

Office Action Summary	Application No. 10/594,779	Applicant(s) FUJIBAYASHI ET AL.	
	Examiner MIKE DOLLINGER	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5-7, 9-12, 15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohmori et al. (US 6,177,508 B1) with further evidence provided by Minami (US 5,567,563).
3. Ohmori et al. disclose a polyurethane resin type composition for slush molding and molded article therefrom [column 1 lines 51-54] comprising (A) a thermoplastic polyurethane elastomer [column 1 lines 57-58] which may be a powder with a particle size preferably 100 to 300µm [column 7 lines 24-27], (B) a plasticizer, (C) a blocked isocyanate [column 1 line 61] such as isocyanurate modified hexamethylene diisocyanate [column 5 lines 52-55], (D) a pigment and (E) 0.5 to 10 parts by weight per 100 parts by weight of (A) of a blocking inhibitor that is a resin powder with a particle diameter of 0.5 to 5 µm [column 1 lines 62-65; column 6 lines 20-21] and wherein (E)

Art Unit: 1796

may be a styrenic and/or acrylic resin are described in Minami [column 6 lines 21-26], discussed below.

4. Minami discloses styrenic and/or (meth)acrylic resins composed of (a) styrenic monomers including styrene [column 4 line 67] and hydroxyl-substituted styrenes [column 5 lines 6-7], (b) (meth)acrylic monomers including methacrylates [column 5 line 22] and hydroxyl-containing methacrylates such as hydroxy methacrylates [column 5 lines 18-19], and (c) other monomers including conjugated dienes [column 5 line 30] such as butadiene [column 5 line 35]. Examiner notes that butadiene reads on the claimed monomer (a02) [see page 12 lines 3-6 of Applicants' disclosure].

5. Regarding claim 15, Applicants claim the vinyl type copolymer as having a crosslinked structure and preferably crosslinked by a polyisocyanate at hydroxyl, carboxyl, or amino functional group. Examiner takes the position that the hydroxyl functionalized styrenic and/or acrylic resin blocking inhibitor (E) will be at least partially crosslinked by the blocked polyisocyanate (C).

6. Regarding claims 11 and 19, Ohmori et al. disclose the thermoplastic polyurethane powder (A) in powder form made by either a non-aqueous or aqueous dispersion and subsequent drying [column 4 line 59 to column 5 line 4] and the slush molding composition prepared by mixing the polyurethane powder (A) containing blocked isocyanate (C) with a blend of plasticizer (B) and pigment (D) followed by adding resin (E) to the powder mixture [column 7 lines 12-14]. Since water is not added and the plasticizers (B) are largely hydrophobic [column 5 lines 30-46], this disclosed mixing process reads on "dry blending".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 9-14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanetani et al (JP 02038453, hereinafter all references are made to the attached translation) in view of Jin et al (US 4,022,849).
8. Kanetani et al disclose thermoplastic polyurethane resin powders suitable for slush molding method [page 10 paragraph 4] with particle size of 1-2000µm [page 10 paragraph 1] and more preferably between 100 and 300µm [page 16 paragraph 2]. The polyurethane resin powder may also include another resin including polyvinyl chloride which may be added in powder form [page 10 paragraph 2]. Kanetani et al also disclose such molded articles as automotive components [page 11 paragraph 1].
9. Kanetani et al do not teach the monomers of the vinyl chloride corresponding to the claimed polymer powders (A) and (E).
10. Jin et al disclose fire retardant polyblends comprising thermoplastic polymers intimately admixed with a crosslinked copolymer of vinyl chloride copolymer [abstract]. The fire retardant additives comprise crosslinked copolymers of, *inter alia*, vinyl chloride [2:18], diethylene glycol dimethacrylate [2:26], methyl methacrylate [2:54-55], and ethylenically unsaturated monocarboxylic acids such as acrylic and methacrylic acids

Art Unit: 1796

[2:59-61]. The particle size of the copolymer particles is in the range of from about 10 to 500 microns [3:50-51]. Jin et al disclose that the fire retardant copolymers may be added to polyurethane resins [5:60-64] and may be admixed with the thermoplastic polymer while each is in the form of a solid powder [6:41-44].

11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared a powdered resin composition comprising a thermoplastic polyurethane resin powder and a fine particle powder of a vinyl type copolymer because Kanetani et al teach that it is within the skill of the art to prepare a powders resin composition comprising a thermoplastic polyurethane resin powder and a polyvinyl chloride resin powder and Jin et al teach that it is within the skill of the art to add a vinyl chloride type copolymer to a polyurethane resin powder. One would have been motivated to use the specific vinyl chloride type copolymer of Jin et al in the composition of Kanetani et al because Jin et al teach that it would increase the fire retardancy of the polymer blend. Absent any evidence to the contrary, there would have been a reasonable expectation of success in using the vinyl chloride type copolymer of Jin et al as the polyvinyl chloride powder in the composition of Kanetani et al.

12. Regarding claims 10 and 18, Kanetani et al in view of Jin et al do not explicitly teach a powdered resin composition comprising 0.1% by weight to 5% by weight of vinyl type copolymer to the thermoplastic resin powder (B). However, Jin et al does teach that the amount of crosslinked vinyl halide copolymer which may be admixed with a thermoplastic polymer substrate will depend, primarily, upon such factors as the

Art Unit: 1796

particular crosslinked vinyl halide copolymer and thermoplastic polymer substrate which are to be blended with one another, the degree of fire retardancy desired in the resulting blend, the degree of clarity, hardness and other specific physical properties which were sought as well as other technical and economic considerations known and understood by those skilled in the art [6:52-62]. Henceforth, Jin et al teach that the amount of crosslinked vinyl halide copolymer added is a result-effective variable. See MPEP § 2144.05 (B). Case law holds that “discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.” See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

13. In view of this, it would have been obvious to one of ordinary skill in the art to utilize the crosslinked vinyl halide copolymer in a chosen amount, including those within the scope of the present claims, so as to produce desired end results with respect to , the degree of fire retardancy desired in the resulting blend, the degree of clarity, hardness and other specific physical properties.

14. Regarding the limitations toward melting temperatures of the claimed polymers (B), (A) and (E) in claims 1 and 5, these are inherent properties dependent upon the structure of the polymers. Since all the structural limitations of these polymers are disclosed in Kanetani et al in view of Jin et al, the melting temperatures are held to be inherently disclosed in the polymers of Kanetani et al in view of Jin et al.

15. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanetani et al (JP 02038453, hereinafter all references are made to the attached

Art Unit: 1796

translation) in view of Jin et al (US 4,022,849) as applied to claims 1 and 5 above, and further in view of Samurkas et al (US 2003/0098114 A1).

16. Kanetani et al in view of Jin et al do not specifically disclose silica fine powder in the powder compositions. However, Kanetani et al do disclose that inorganic fillers and reinforcing materials may be added to the polyurethane resin [page 10 paragraph 3] and one of the fillers added in the inventive examples was titanium dioxide [page 15 paragraph 1].

17. Samurkas et al discloses polyurethane adhesives [abstract]. Samurkas et al teach that reinforcing fillers include titanium dioxide and silica [0016]. Samurkas et al teach, henceforth, that titanium dioxide and silica are functionally equivalent for the purpose of adding to a polyurethane as a reinforcing filler. It is *prima facie* obvious to substitute art-recognized functional equivalents known for the same purpose. See MPEP § 2144.06.

18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used silica as a reinforcing inorganic filler in a powder composition comprising a polyurethane resin powder and a vinyl type copolymer because Kanetani et al in view of Jin et al teach that it is within the skill of the art to use titanium dioxide as a reinforcing inorganic filler in a powder composition comprising a polyurethane resin powder and a vinyl type copolymer and Samurkas et al teach that it is within the skill of the art to use both silica and titanium dioxide in a polyurethane composition. One would have been motivated to have substituted silica for titanium dioxide because Samurkas et al teach that they are functionally equivalent for the

Art Unit: 1796

purpose of a reinforcing filler in a polyurethane composition. Absent any evidence to the contrary, there would have been a reasonable expectation of success in substituting silica for titanium oxide in the resin powder composition of Kanetani et al in view of Jin et al.

19. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmori et al. (US 6,177,508 B1) in view of Patnaik (Patnaik, Pradyot (2003). Handbook of Inorganic Chemicals. McGraw-Hill.).

20. Ohmori et al. do not explicitly disclose silica fine powder added in the polymer mixture. However, Ohmori et al. do teach that the pigment (D) may be any known inorganic pigments [column 6 lines 7-9].

21. Patnaik teaches that amorphous silica is used as a pigment [page 826 2nd paragraph].

22. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made a powdered resin composition comprising a polyurethane dispersion, vinyl type copolymer dispersion and a silica powder because Ohmori et al. teach that it is within the skill of the art to produce a slush molding composition comprising a polyurethane, a styrenic and/or acrylic polymer and an inorganic pigment and Patnaik teach that it is within the skill of the art to add silica as a pigment. One would have been motivated to do this because Ohmori et al. suggest the use of any inorganic pigment known in the art. Absent any evidence to the contrary,

Art Unit: 1796

there would have been a reasonable expectation of success in using silica as a pigment in the composition of Ohmori et al.

23. Claims 3, 4, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmori et al. (US 6,177,508 B1) with further evidence provided by Minami (US 5,567,563) in view of Tanaka et al. (US 4,737,432).

24. The styrenic and/or acrylic resins of Ohmori et al., described in Minami do not disclose monomers of polyhydric alcohol poly(meth)acrylate or ethylene glycol dimethacrylate.

25. Tanaka et al. disclose ordinary binder resins for toners [column 12 lines 33-34] with include styrene-acrylate copolymers [column 12 lines 39-44] and carboxyl functional acrylic copolymers with comonomers including ethylene glycol dimethacrylate [column 13 lines 47-48], methyl acrylate, methyl methacrylate, and many other (meth)acrylate monomers [column 13 lines 34-37]. Most of these monomers are listed as suitable methacrylate monomers of the binder resins of Minami, as discussed above [column 5 lines 13-27 of Minami]. Henceforth, Tanaka et al. teaches that ethylene glycol dimethacrylate is functionally equivalent to the acrylic monomers used in the acrylic resins of Ohmori et al. described in Minami. It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the same purpose. Please see MPEP § 2144.06. Ethylene glycol dimethacrylate also reads on polyhydric alcohol poly(meth)acrylate.

Art Unit: 1796

26. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used methyl methacrylate and ethylene glycol dimethacrylate in the slush molding compositions of Ohmori et al. because Ohmori et al. teach that styrenic and/or acrylic toner binder resins described in Minami et al. are suitable for the blocking inhibitor and Tanaka et al. teach that ethylene glycol dimethacrylate is functionally equivalent to the (meth)acrylate monomers described in Minami et al. used in combination with methyl methacrylate. Absent any evidence to the contrary, there would have been a reasonable expectation of success of forming a blocking inhibitor for the slush molding composition of Ohmori et al. with methyl methacrylate and ethylene glycol dimethacrylate.

Response to Amendment

27. The rejection of claims 1, 3-7, 9, 10, 12-15, 17, 18 and 20 under 35 USC § 102(b) over Kinsho et al (US 7,005,480 B2) in the previous Office Action has been obviated by the amendments to claims 1 and 5.

Response to Arguments

28. Applicant's arguments filed 08/18/2009 with respect to the objection of the specification have been fully considered but they are not persuasive. Applicants claim that the specification is in proper idiomatic English. Examiner disagrees. Clear examples of non-idiomatic English in the specification include "The vinyl chloride type material has been deteriorated in softness since the plasticizer contained therein has

Art Unit: 1796

been moved toward the surface during a long time use, depending on the use environment" [0002] and "The shape of the above-mentioned (A) or (E) is not particularly limited, however it is preferably spherical or close to be spherical in terms of the flow-ability of the material at the time of molding" [0052].

29. Applicant's arguments filed 08/18/2009 with respect to Ohmori et al have been fully considered but they are not persuasive.

30. Applicants argue that none of the working Examples of Ohmori et al contain an example of a composition containing the combination of all the components of the present claims, and Ohmori et al, therefore, do not anticipate the claims. Applicants point to Example 3 of Ohmori et al which contains a styrene resin powder as a blocking inhibitor but does not contain the claimed monomers. This argument is not convincing. Applicants' arguments amount to a contention that the claimed element is a nonpreferred embodiment of the prior art. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments, see *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments, see *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Furthermore, Examiner does not rely on Example 3 of Ohmori et al in the rejections above.

Art Unit: 1796

31. Applicants also argue that Ohmori et al cites the "polyurethane, polyimides, styrenic resins, polyamides, acrylic resins and epoxy resins, as described in U.S. Pat. No. 5,567,563" to Minami, but that Minami does not disclose polyimides and the order of resins listed in Minami is not the same as the order of resins listed in the above citation of resins in Ohmori et al. Applicants argue that this makes the disclosure of Ohmori et al unclear with respect to the precise parts of the disclosure of Minami that are being referred to in Ohmori et al. This argument is not convincing. The inclusion of polyimides is most likely a typo and the order of listing resin types is irrelevant and would not be considered by the ordinarily skilled artisan.

32. Applicants also argue that if the entire disclosure of Minami is cited by Ohmori et al, then Examiner does not indicate how he can indicate a copolymer of the spresent invention within such huge lists of compounds without the guidance of the present specification. This argument is not convincing. Styrenic resins are chosen from short list of 6 types of resins. These styrenic resins disclosed in Minami require (a) styrenic monomers and/or (b) (meth)acrylic monomers [column 4 lines 48-50], both of which read on the claimed monomer (a01) and a large number of each (the hydroxyl functional monomers) read on (a03). The only monomer chosen from a large group is the additional monomer (c) which includes butadiene, which reads on claimed monomer (a02) and results in a crosslinked structure.

33. Applicants also argue that Ohmori et al and Minami do not disclose a blocking inhibitor (E) which is hydroxy functional. This argument is not convincing. The blocking

Art Unit: 1796

inhibitor (D) containing the hydroxy functional monomers disclosed in Minami and cited in paragraph 4 above are hydroxy functional.

34. Applicants also argue that the blocking inhibitor (E) of Ohmori et al will not be crosslinked by a polyisocyanate until the molding step because the polyisocyanate is blocked and henceforth the fine particle powders (A) and (E) of the present invention will not function as flowability improvers as required by the claims. This argument is not convincing. Assuming that the blocking inhibitor (E) cannot act as a flowability improver once it has crosslinked with a polyisocyanate, before this crosslinking the blocking inhibitor does act as a flowability improver. In fact the blocking inhibitor is specifically added to improve flowability [column 6 lines 61-64]. Before crosslinking with the polyisocyanate the blocking inhibitor (E) is still crosslinked due to the presence of the aforementioned butadiene. Henceforth, the blocking inhibitor reads on the claimed flowability improver of claims 1 and 5 before molding and on the fine particle powder (B) of claim 15 after molding. Furthermore, there is no evidence that once crosslinked by the polyisocyanate (even before molding) that the blocking inhibitor (E) will not improve flowability.

35. Applicants also argue that the claimed melting temperatures of the fine particle powders (A) and (E) cannot be disclosed in the resins of Minami because Minami does not explicitly disclose that the polymers are crosslinked and therefore have a different structure than the claimed polymers. This argument is not convincing. The presence of a monomer with more than one vinyl group, e.g. butadiene, will inherently cause crosslinking in a vinyl based polymer.

36. Applicant's arguments filed 08/18/2009 with respect to Kanetani et al in view of Jin et al have been fully considered but they are not persuasive.

37. Applicants argue that vinyl halide copolymers of Jin et al would not be able to perform the function of a flowability improver because it is not included in the amount of 0.1 to 5% by weight as claimed in claims 10 and 18. This argument is not convincing. As cited by Applicant, the vinyl halide copolymers of Jin et al may be used in amounts as low as 5% by weight [see Applicants' arguments page 16 paragraph 2]. So at least at the point 5% by weight and probably in the weight percents above that, the disclosed powders will provide flowability. Furthermore, the vinyl halide copolymers of Jin et al are free flowing [see Examples 5 and 6] and would most likely be flowability improvers at any amount.

Applicants also argue that neither Kanetani et al nor Jin et al teach disclose the specific purpose of use as a powder flowability improver according to the invention. Applicants argue that one of ordinary skill in the art would not optimize the amount of powder additive in Kanetani et al to find the optimum powder flowability. This argument is not convincing. While Applicants' statements are correct, i.e. one of ordinary skill in the art would not have been directed to optimize the powder flowability, this is irrelevant to the *prima facie* case of obviousness. Examiner has established that one having ordinary skill in the art would have optimized the fire retardancy and other advantageous properties disclosed in Jin et al. Applicants' arguments amount to a contention that the prior art is combined for a different reason than Applicants' reasons.

Art Unit: 1796

The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MIKE DOLLINGER whose telephone number is (571)270-5464. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/mmd/

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796